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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,327	05/19/2006	Ferrari Vittorio	2520-1064	8214
466	7590	08/06/2007		
YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			EXAMINER KWOK, HELEN C	
			ART UNIT 2856	PAPER NUMBER
			MAIL DATE 08/06/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/549,327	<b>Applicant(s)</b> VITTORIO ET AL.	
	<b>Examiner</b> Helen C. Kwok	<b>Art Unit</b> 2856	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 1-22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>September 16, 2005</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

2. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

### ***Claim Objections***

3. Claims 1-22 are objected to because of the following informalities. Appropriate correction is required.

In claim 1, line 1, the phrase "the value" should be changed to – a value --. In line 1, the phrase "the resonant frequency" should be changed to – a resonant frequency --. In line 8, the phrase "the parallel capacitance" should be changed to – a parallel capacitance --.

In claim 2, line 3, the phrase "the phase" should be changed to – a phase --. In lines 3-4, the phrase "the impedance" should be changed to – an impedance --.

In claim 3, line 3, the phrase "the response" should be changed to – a response -

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In claim 4, line 2, the phrase "the series resonant frequency" should be changed to – a series resonant frequency --.

In claim 5, line 2, the phrase "the series resonant frequency" should be changed to – a series resonant frequency --.

In claim 6, line 3, the phrase "the value" should be changed to – a value --.

In claim 7, line 3, the phrase "the value" should be changed to – a value --. In line 3, the phrase "the quality factor" should be changed to – a quality factor --.

In claim 11, line 1, the phrase "the value" should be changed to – a value --. In lines 1-2, the phrase "the resonant frequency" should be changed to – a resonant frequency --. In line 2, the word "anacousto-mechanical" should be changed to – an acousto-mechanical --. In line 10, the phrase "the parallel capacitance" should be changed to -- a parallel capacitance --. In lines 10-11, the word "anacousto-mechanical" should be changed to – an acousto-mechanical --.

In claim 12, line 2, the phrase "the frequency-controlling element" should be changed to – a frequency-controlling element --.

In claim 13, line 2, the phrase "the series resonant frequency" should be changed to – a series resonant frequency --.

In claim 14, line 2, the phrase "the series resonant frequency" should be changed to – a series resonant frequency --.

In claim 15, line 3, the phrase "the series resonant frequency" should be changed to – a series resonant frequency --.

In claim 17, it appears that this claim should be depended on claim 16 and not claim 15 to provide proper antecedent basis.

In claim 18, lines 1-2, the phrase "at least one section is included" is not clear on its meaning? What "section"? Please clarify.

***Allowable Subject Matter***

4. Claims 1-22 are allowable over the prior art of record.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The references cited are related to resonator having a first electrical signal and a second electrical signal.

6. This application is in condition for allowance except for the following formal matters as set forth above.

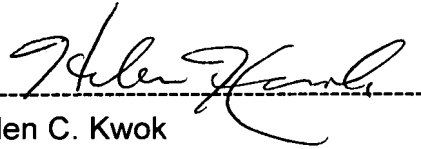
Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935).

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen C. Kwok whose telephone number is (571) 272-2197. The examiner can normally be reached on 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
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Helen C. Kwok  
Art Unit 2856

hck  
July 31, 2007